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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/027,681

12/21/2001

T. Daniel Gross

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12/23/2008

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EXAMINER

YABUT, DIANE D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/027,681	<b>Applicant(s)</b> GROSS ET AL.	
	<b>Examiner</b> DIANE YABUT	<b>Art Unit</b> 3734	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-7, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-7, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/22/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

This action is in response to applicant's amendment received on 09/22/2008.

The examiner acknowledges the amendments made to the claims.

#### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 09/22/2008 is acknowledged. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Buelna** (U.S. Patent No. **5,242,459**) in view of **Andreas** (U.S. Patent No. **5,797,929**) and **Nobles** (U.S. Patent No. **6,733,509**).

Claim 3: Buelna discloses a suture trimmer comprising a shaft **16** having a proximal end and a distal end and an axis therebetween, a suture retainer **12** having a groove **58** formed in the side thereof, the groove **58** in communication with an opening **38** formed in the side of the shaft, the opening **38** disposed proximal the distal end (Figures 1 and 4). Buelna discloses a cutting member **30** and the suture retainer **12** both slidably

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disposed within the shaft **16** (col. 4, lines 7-13). Buelna also discloses a handle assembly, the handle disposed adjacent the proximal end of the shaft (Figure 1).

Buelna discloses the handle assembly further including a first lever **60** and a second lever **62** that are operatively coupled to the suture retainer and cutting member, respectively (col. 5, lines 49-52 and lines 55-58).

Buelna discloses the claimed device, except for the shaft **16** having the groove formed in a side thereof, the groove being in communication with an opening formed in the side of the shaft, although as mentioned above Bulena does disclose the suture retainer **12** having the groove and opening. Buelna also does not expressly disclose the suture retainer slidably disposed within the shaft and within the cutting member, wherein the suture retainer is moved within the shaft and within the cutting member and the cutting moves around the suture retainer to cut the suture, as well as the suture retainer having a suture protector in an exterior surface of the suture retainer, the suture protector extending from a retainer distal end toward a retainer proximal end.

Andreas discloses a suturing instrument **100** with an outer shaft **104** having a groove (distal end, by element **112** in Figure 5) formed in a side thereof, the groove extending from the distal end toward the proximal end, the groove being in communication with an opening **120** formed in the side of the shaft, the opening disposed proximal the distal end of the shaft. It would have been obvious to one of ordinary skill in the art at the time of invention to provide the groove in communication with an opening in a shaft, as taught by Andreas, to Buelna since it was well known in the art to have a receiving opening and groove along a external surface of a suturing

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instrument in order to readily load sutures onto the device so that they may be effectively manipulated.

Andreas also discloses in a similar embodiment a suture retainer **20** having a suture protector **60** in an exterior surface of the suture retainer, the suture protector extending from a retainer distal end toward a retainer proximal end (Figures 3-4). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a suture protector, as taught by Andreas, to Buelna in order to block movement of the suture away from the retainer (col. 4, line 66 to col. 5, line 4).

Nobles teaches a suture retainer **528**, **532** disposed within a cutting member **536**, both disposed in a shaft **515**, wherein the suture retainer is moved within the shaft and within the cutting member and the cutting member moves around the suture retainer to cut the suture (Figures 29-33D). It would have been obvious to one of ordinary skill in the art at the time of invention to provide the suture retainer within the cutting member, as taught by Nobles, to Buelna to effectively form a knot as well as act as a suture cutter (col. 8, lines 53-55) and facilitate manipulation of the suture during the process of cutting.

Claim 4: Buelna discloses a biasing member **40**, the biasing member **40** in communication with the cutting member **30** (col. 4, lines 32-36 and col. 5, lines 3-9).

Claim 5: Buelna discloses the opening **38** having a proximal edge and the cutting member **30** having a sharpened edge **36** which is adapted to engage the proximal edge to sever suture when suture is disposed through the groove and opening (col. 5, lines 53-55).

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Claim 6: Buelna discloses a sharpened edge **36** of a cutting member **30** which is retracted within the shaft until it is withdrawn by applying a force to the second lever **62** (col. 5, lines 49-52).

Claim 7: Buelna discloses a suture that is disposed within the groove **58** and opening **38** by retracting the suture retainer within the shaft **16** by applying a force to the first lever **60** (col. 5, lines 29-33).

Claim 27: Buelna, Andreas, and Nobles (embodiment of Figures 29-33D) disclose the claimed device except for the cutting member having a proximally facing cutting edge. The embodiment of Figures 29-33D in Nobles teaches a heating element **536** as the suture cutter.

Another embodiment in Nobles teaches a suture cutter with a cutting member having a proximally facing cutting edge **124** (Figure 3A). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined device of Buelna, Andreas, and Nobles (embodiment of Figures 29-33D) by providing a proximally facing cutting edge, as taught by Nobles (embodiment in Figure 3A) in order to secure and trim back a suture rapidly and accurately in one device (col. 1, lines 31-33).

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4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Buelna** (U.S. Patent No. **5,242,459**) in view of **Andreas** (U.S. Patent No. **5,797,929**) and **Nobles** (U.S. Patent No. **6,733,509**), as applied to claim 3 above, and further in view of **Sancoff** (U.S. Pub. No. **20020010480**).

Claim 28: Buelna, Andreas, and Nobles disclose the claimed device except for the first lever and the second lever each being movable with respect to the handle.

Sancoff teaches a first lever **22** and a second lever **24** each being movable with respect to a handle **14**, which actuate a suture retainer and cutting member, respectively (Figure 2). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a first lever and a second lever being each movable with respect to a handle, as taught by Sancoff, to Buelna, Andreas, and Nobles since it was well known in the art to use levers to facilitate actuation of cutting and retaining members in surgical devices.

### ***Response to Arguments***

5. Applicant's arguments filed 09/22/2008 have been fully considered but they are not persuasive.

6. The applicant generally argues that Buelna, Andreas, and Sancoff do not appear to teach a suture protector in an exterior surface of a suture retainer. However, as maintained above, Andreas discloses a suture retainer **20** having a suture protector **60** in an exterior surface of the suture retainer, the suture protector extending from a retainer distal end toward a retainer proximal end (Figures 3-4). It would have been

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obvious to one of ordinary skill in the art at the time of invention to provide a suture protector, as taught by Andreas, to Buelna in order to block movement of the suture away from the retainer (col. 4, line 66 to col. 5, line 4).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/  
Examiner, Art Unit 3734

/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3731